

What is Composting?

Composting is often called “nature’s recycling system”. Did you ever wonder why? Well let me tell you. Organic materials rot in nature. For example when leaves fall on the ground the materials begin a natural process of decay. Thanks to the water, warmth, air, worms, insects, bacteria, and fungi. Eventually the leaves and other organic material become nutrient-rich humus, which is a necessary part of healthy soil.

Composting is when microorganisms such as mites, springtails, millipedes, sowbugs, centipedes and earthworms and bacteria break down organic materials such as grass clippings, leaves, food waste and woody materials it produces soil-like materials called “*compost*”.

Compost is organic material that can be used as a soil amendment. Compost is also known as called “*humus*” that is dark brown in color and has an earthy smell. It is created by combining organic material (e.g., yard trimmings, food wastes, manures) in proper ratios as necessary to accelerate the breaking down of organic materials; and allowing the finished material to mature through a curing process.

As vegetation falls to the ground, it slowly decays, providing minerals and nutrients needed for plants, animals, and microorganisms. Mature compost, however, includes the production of high temperatures to destroy pathogens and weed seeds that natural decomposition (breaking down) does not destroy.

Composting is a natural form of recycling. It just happens!!

Did you know?

Composting yard trimmings and food scraps together make up 24% of the municipal solid waste (MSW) waste stream. Instead of sending the yard trimmings and food waste to our local landfill, let’s make a deal and try composting the food scraps and yard trimmings instead.

What are some benefits?

- ✓ Provides nutrients to plants
- ✓ Suppresses weeds
- ✓ Saves money
- ✓ Reduces the amount of yard waste entering the landfill
- ✓ Reduces the amount of food waste entering the landfill
- ✓ Rules out the need for chemicals

How do I make my own compost pile?

Think of it as making lasagna. Yes, lasagna.....

Choose a space in your backyard to put your compost bin. In the bin, put layers of brown material, then a layer of green material, then a layer of food scraps, and then spray with water. Remember not to soak the pile. It should feel like a damp wrung out sponge. Repeat the process until your compost bin is about $\frac{3}{4}$ full or at a comfortable height for you.

The compost pile will heat up and produce compost quickly when you are actively turning (mixing together) the pile. Remember temperature is very important when composting. Make sure you turn the pile from the outside, in. You can use a pitch fork to mix all of the ingredients in the pile. Ask for your parents help with turning the pile.

Note: Green stuff still has living parts in it like your grass clippings, weeds and other plants and fresh kitchen scraps. Green stuff is high in carbon.

Brown stuff is dead like dried up leaves that are no longer green. Brown stuff is high in nitrogen.

What can I put in my compost pile?

- * Horse and cow manure
- * Coffee grounds and filters
- * Tea bags
- * Grass clippings
- * Fruits and vegetable scraps
- * Torn or shredded newspaper
- * Cereal boxes
- * Cardboard
- * Leaves
- * Tree limbs (chopped)
- * Yard trimmings
- * Hay and straw

What are the five essentials of composting?

- 1) Material - Nitrogen (green materials) and Carbon (brown materials)
- 2) Air – Every pile needs air to survive just like humans.
- 3) Time – It takes time for compost to produce.
- 4) Surface area or size of the compost pile or bin – If the area is too small the compost pile will have an odor, the material should not be packed in the bin. The bin should be 3'x3'x3'.
- 5) Moisture content - Water should be 50% and feel like a damp wrung out sponge.

What can't I put in my compost pile?

The Texas Commission on Environmental Quality (TCEQ) suggests that we DO NOT compost with the following:

- Dairy Products – yogurt, milk, sour cream, butter, etc. causes odor
- Meat Products – fish, bones, etc. attracts pests and rodents and causes odor
- Coal or charcoal ash – may contain substances that are harmful to plants
- Treated wood and lumber – might kill beneficial composting organisms
- Pet (cat and dog) feces – might contain viruses, parasites, germs and other bacteria that is harmful to humans.

NOTE: Finished compost can be applied to lawns and gardens to help condition the soil and replenish nutrients. Compost, however, should not be used as potting soil for houseplants because of the presence of weed and grass seeds.

Where can I purchase a compost bin?

There are a few ways to get a compost bin. Your parents can sign up to take a fall or spring compost class which is only \$15.00 per person and they will receive a compost bin, instructional materials, t-shirt, field trips on Saturday and a free lunch on Saturday. For the next scheduled compost class visit our website at www.cstx.gov/bvswma. A bin can be purchased online at www.ceshepherd.com.

Are there different types of compost bins?

There are several types of bins and even ones you can build yourself for free, like a pallet bin. I'm sure you can find some businesses that will give away pallets for free. Visit <http://www.cstx.gov/home/index.asp?page=2065> to see a list of bins that are available.

Things to Remember...

By composting, you put this natural process to work in your own backyard. When you mix "brown" and "green" organic waste in a pile or bin, you provide the ingredients that are needed to get the process started. Organisms such as worms, insects, soil bacteria, and fungi, are attracted to this material because it provides a source of food. By keeping your organic mixture moist and turning it regularly, you help speed up the rotting process.

Critters Working in the Compost Pile



Earwig – Feeds mainly on both dead and living insects, algae and fungi.



Centipede – Feeds on insects and spiders.



Earthworm – Feeds on organic matter, helps break up soil and helps make soil loose, allowing water and air to pass to the roots.



Ground Beetle – feeds on insects and snails.



Springtails – feeds on algae and decomposing vegetables, bacteria and fungi.



Fire Ant – feed mainly on insects and small creatures.



Snails – feed on plants and other vegetation, algae and decomposing organic matter.



Crane Fly Larvae – feeds on decomposing organic matter.



Sap Beetles – feed on decomposing fruit and vegetables.



Millipede – feeds on decomposing organic matter.



Scarab Beetles – feed on animal feces.



Pillbugs/Sowbugs – feed on decomposing organic material.



Fly Larvae – feeds on decomposing fruit and vegetables.